

CLAIMS

What is claimed is:

1. An integrated enclosure/touch screen assembly comprising:
a display mechanism;
5 a digitizer mechanism comprising a top film and a resistive digitizing element; and
a single piece cover enclosure for said touch screen assembly disposed over said top film of said digitizer mechanism to allow mechanical transfer between said single piece cover and said digitizer mechanism,
10 wherein said resistive digitizing element can be activated by mechanical pressure applied to the external surface of said single piece cover enclosure.
2. An integrated enclosure/touch screen assembly according to
15 Claim 1 wherein said single piece cover enclosure is constructed using in mold decoration.
3. An integrated enclosure/touch screen assembly according to
Claim 1 wherein a soft thermoplastic outer film is coupled to said top film of
20 said digitizer mechanism by in mold decoration to form said single piece cover enclosure.

4. An integrated enclosure/touch screen assembly according to Claim 1 wherein finger pressure on the external surface of said single piece cover enclosure can be used to activate said digitizer mechanism.
5. An integrated enclosure/touch screen assembly according to Claim 1 wherein stylus pressure on the external surface of said single piece cover enclosure may be used to activate said digitizer mechanism.
6. An integrated enclosure/touch screen assembly according to Claim 1 wherein said single piece cover comprises a mylar polycarbonate material.
7. An integrated enclosure/touch screen assembly according to Claim 3 wherein said soft thermoplastic film has sufficient deflection under external pressure to active said digitizer mechanism.
8. An integrated enclosure/touch screen assembly according to Claim 1 wherein said single piece cover enclosure for said display mechanism and said digitizer mechanism is constructed with a flat outer top surface free of any indentation.
9. An integrated enclosure/touch screen assembly comprising:
a display mechanism;

a digitizer mechanism comprising a top film and a digitizing element;
a single piece cover enclosure that is bezel-less; and
a supporting structure for supporting said display mechanism, said
digitizer mechanism and said single piece cover enclosure, wherein said
5 digitizing element and said single piece cover enclosure form a single
mechanical structure and wherein said digitizer element can be activated by
mechanical pressure applied to the external surface of said single piece
cover enclosure.

10 10. An integrated enclosure/touch screen assembly according to
Claim 9 wherein said single piece cover enclosure is a soft thermoplastic
outer film that is coupled to said top film of said digitizer mechanism and to
said supporting structure.

15 11. An integrated enclosure/touch screen assembly according to
Claim 9 wherein finger pressure on the external surface of said single piece
cover enclosure may be used to activate said digitizer mechanism.

20 12. An integrated enclosure/touch screen assembly according to
Claim 9 wherein stylus pressure on the external surface of said single
piece cover enclosure may be used to activate said digitizer mechanism.

13. An integrated enclosure/touch screen assembly according to Claim 9 wherein said digitizing element of said digitizer mechanism is a resistive type digitizing element.

5 14. An integrated enclosure/touch screen assembly according to Claim 10 wherein said soft thermoplastic film has sufficient deflection under external pressure to activate said digitizer mechanism.

10 15. An integrated enclosure/touch screen assembly according to Claim 10 wherein said single piece cover enclosure is coupled to both said top film of said digitizer mechanism and to said supporting structure to provide a flat outer top surface free of any indentation.

15 16. A display assembly for a portable electronic device comprising:
a flat panel display screen;
flat panel, clear, resistive digitizer mechanism disposed over said flat panel display screen; and
a bezel-less cover film disposed over a top surface of said digitizer
20 mechanism wherein said cover film and said top surface combine to form a single mechanical structure and wherein mechanical deflection of said cover film can be used to activate said digitizer mechanism.

17. A display assembly as described in Claim 16 wherein said cover is constructed using in mold decoration process.

18. A display assembly as described in Claim 16 wherein said
5 digitizer mechanism is a resistive type digitizing element.

19. A display assembly as described in Claim 16 wherein said cover is a soft thermoplastic outer film that is coupled to said top film of said digitizer mechanism.

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20. A display assembly as described in Claim 19 wherein said soft thermoplastic film has sufficient deflection under external pressure to activate said digitizer mechanism.